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Colonel Gwen Bingham
Garrison Commander
Headquarters, U.S. Army Garrison, Fort Lee
1100 Lee Avenue, Suite 112
Fort Lee, Virginia 23801

RE: Draft Environmental Impact Statement on Implementation of Base Closure and Realignment (BRAC) Recommendations and Other Army Actions at Fort Lee, Virginia and Fort A. P. Hill, Virginia
DEQ-06-167F

Dear Colonel Bingham:

The Commonwealth of Virginia has completed its review of the above-listed Draft Environmental Impact Statement ("Draft EIS"), which includes a federal consistency determination. The Department of Environmental Quality ("DEQ") is responsible for coordinating Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act ("NEPA") and responding to appropriate federal officials on behalf of the Commonwealth. DEQ is also the lead agency for coordinating Virginia's review of federal consistency determinations submitted pursuant to the Coastal Zone Management Act ("CZMA"). The following state agencies, regional planning district commission, and localities joined in the review of the Draft EIS:

Department of Environmental Quality
Department of Game and Inland Fisheries
Department of Agriculture and Consumer Services
Department of Conservation and Recreation
Department of Health
Department of Transportation
Marine Resources Commission
Department of Historic Resources
Department of Mines, Minerals, and Energy

Department of Forestry
Virginia Council on Indians
Crater Planning District Commission
RADCO Planning District Commission [e-mailed 11/15]
Prince George County
City of Hopewell.

In addition, the RADCO Planning District Commission and Caroline County were invited to comment.

Because the Draft EIS covers two distinct geographic locations, we have divided the discussions of "environmental impacts and mitigation" and "regulatory and coordination needs" (both of which follow "project description," next) into three sub-sections addressing common issues, issues relating to Fort Lee, and issues relating to Fort A. P. Hill.

Project Description

Pursuant to the recommendations of the Defense Base Closure and Realignment (BRAC) Commission, which became law in November 2005, the Army proposes to implement the recommendation that Fort Lee be realigned. This would involve relocating approximately 7,700 military personnel to Fort Lee, building additional facilities to accommodate personnel and functions, and conducting training and other operations at both Fort Lee (in Prince George County and Fort A. P. Hill (in Caroline County) (Draft EIS, page ES-2). Fort A.P. Hill would have an additional 4-day daily personnel load of 880 soldiers and instructors, along with a limited number of permanent personnel (Draft EIS, page ES-5).

The Draft EIS describes four alternative courses of action:

1. Emphasis on use of "buildable" land (without environmental constraints);

2. Emphasis on use of undeveloped, unconstrained land north of Route 36;

3. Emphasis on consolidation with existing Quartermaster School while minimizing the displacement of existing facilities; and

4. Emphasis on maximum consolidation.

The second of these alternative emphases is defined as the preferred alternative, and is the only one evaluated in detail in the Draft EIS (Draft EIS, page ES-6).

The project contemplates extensive development at Fort Lee and more limited development at Fort A. P. Hill (Draft EIS, pages 2-1 through 2-11).

Environmental Impacts and Mitigation

A. Comments Applicable to both Fort Lee and Fort A. P. Hill

In this part of the response, DEQ presents information, comments, and guidance applicable to activities at both Fort Lee and Fort A. P. Hill.

1. Natural Heritage Resources. The Department of Conservation and Recreation has searched its Biotics Data System for occurrences of natural heritage resources at Forts Lee and A. P. Hill. "Natural heritage resources" are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations. Information, analysis, and recommendations resulting from this search are presented below in items B.1. (for Fort Lee) and items C.1., C.2, and C.3. (for Fort A. P. Hill).

2. Wildlife Resources. Information, analysis, and recommendations from the Department of Game and Inland Fisheries are presented in items B.2. and C.4., below.

(a) Wildlife Agency Jurisdiction. The Department of Game and Inland Fisheries, as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state or federally listed endangered or threatened species, but excluding listed insects. The Department (hereinafter "DGIF") is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S.C. sections 661 et seq.), and provides environmental analysis of projects or permit applications coordinated through the Department of Environmental Quality and several other state and federal agencies. DGIF determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce, or compensate for those impacts.

(b) Endorsement of Wildlife Protection Recommendations. DGIF endorses the mitigation measures specified in the Draft EIS (page 4-63, "Mitigation" heading). These measures make sense for both Forts although the Draft EIS presents them only in connection with Fort Lee; see item C.5, below.

(c) Additional Wildlife Information. The Department of Game and Inland Fisheries maintains a data base of wildlife locations, including threatened and

endangered species, trout streams, and anadromous fish waters. This data base may contain information not available from the DCR Biotics Data System (see item A.1, above). The data base is at the following web site:

http://www.dgif/virginia.gov/wildlife/info_map/index.html

Questions on the data base may be directed to the Department of Game and Inland Fisheries (Shirl Dresser, telephone (804) 367-6913).

3. Threatened and Endangered Plant and Insect Species. The Department of Agriculture and Consumer Services (VDACS), which has regulatory authority to conserve state-listed rare, endangered, and threatened plant and insect species under the Virginia Endangered Plant and Insect Species Act, has established a memorandum of agreement with the Department of Conservation and Recreation (DCR). Under this Agreement, DCR's Division of Natural Heritage, in consultation with VDACS, represents VDACS in commenting on potential impacts of reviewed projects or activities on state-listed plant and insect species. See items B.3 and C.4., below.

4. Solid and Hazardous Waste Management. The Draft EIS discussed solid and hazardous waste issues, according to DEQ's Waste Division.

(a) Contamination. Any soil suspected of contamination, or wastes that are generated, must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations. These include, but are not limited to, the Virginia Waste Management Act (*Virginia Code* sections 10.1-1400 et seq.), the Virginia Hazardous Waste Management Regulations (9 VAC 20-60), and the Virginia Solid Waste Management Regulations (9 VAC 20-80). (See the enclosed DEQ memo, Kohler to Ellis, dated November 3, 2006 for additional citations.)

(b) Demolition or Renovation of Structures. All structures to be demolished, renovated, or removed should be checked beforehand for asbestos-containing materials and lead-based paint. If asbestos-containing materials are found, the Army must follow the requirements of 9 VAC 20-80-640 as well as other requirements in the Solid Waste Management Regulations cited above. Similarly, if lead-based paints are found, the Army must follow the requirements of 9 VAC 20-60-261 as well as other requirements in the Hazardous Waste Management Regulations.

(c) Pollution Prevention. DEQ encourages the Army to implement pollution prevention principles in all construction activities. These include

reduction of waste materials at the source, re-use of materials, and recycling of all solid wastes generated. Hazardous waste generation should be minimized, and hazardous wastes handled appropriately. See also item A.11, below.

5. Air Quality. According to DEQ's Division of Air Program Coordination, Fort Lee is in an ozone non-attainment area and Fort A. P. Hill is in an ozone attainment area.

(a) Fugitive Dust Control. During construction activities, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

(b) Open Burning. If project activities include the burning of construction or demolition material or land-clearing debris, this activity must meet the requirements under 9 VAC 5-40-5600 et seq. of the Regulations for open burning, and it may require a permit (see "Regulatory and Coordination Needs," item A.1, below). The Regulations provide for, but do not require, the local adoption of a model ordinance concerning open burning. The Army should contact appropriate local officials to determine what local requirements, if any, apply. The model ordinance includes, but is not limited to, the following:

- All reasonable effort shall be made to minimize the amount of material burned, with the number and size of the debris piles;
- The material to be burned shall consist of brush, stumps and similar debris waste and clean burning demolition material;
- The burning shall be at least 500 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted;
- The burning shall be conducted at the greatest distance practicable from highways and air fields;
- The burning shall be attended at all times and conducted to ensure the best possible combustion with a minimum of smoke being produced;
- The burning shall not be allowed to smolder beyond the minimum period of time necessary for the destruction of the materials; and

- The burning shall be conducted only when the prevailing winds are away from any city, town or built-up area.

(c) Fuel-burning Equipment. Fuel-burning equipment used in construction activities, and/or in heating and cooling the resulting buildings at either Fort may require one or more air pollution control permits. See "Regulatory and Coordination Needs," item A.1, below.

6. Erosion and Sediment Control; Stormwater Management.

(a) Erosion and Sediment Control. Federal agencies and their authorized agents conducting regulated land-disturbing activities on public and private lands in the Commonwealth of Virginia must comply with the Virginia Erosion and Sediment Control Law (*Virginia Code* section 10.1-567) and its implementing regulations, the Virginia Stormwater Management Law (*Virginia Code* section 10.1-603.15) and its implementing regulations (see item A.6.(b), next), and other applicable federal non-point source pollution control mandates such as section 313 of the Clean Water Act and the federal consistency requirements of the Coastal Zone Management Act (Title 15, Code of Federal Regulations, Part 930). Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, or other structures, dredge spoil areas, or related land conversion activities that disturb 10,000 square feet or more (2,500 square feet or more in Chesapeake Bay Preservation Areas) are regulated by the Erosion and Sediment Control Law and its implementing regulations. Accordingly, the Army should prepare and implement an Erosion and Sediment Control Plan for land-disturbing activities at each Fort that complies with state law. The Army is ultimately responsible for achieving project compliance through oversight of on-site contractors, regular field inspection, prompt action against non-compliance, and/or other mechanisms consistent with Army policy. The Army is encouraged to contact the Department of Conservation and Recreation to obtain plan development or implementation assistance so as to ensure project compliance during and after construction; see "Regulatory and Coordination Needs," item A.3, below.

(b) Stormwater Management. The Army must also comply with the Stormwater Management Law (*Virginia Code* section 10.1-603). A Stormwater Management Plan is required for any project involving land disturbance of 1 acre or more. Types of projects include clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, or other structures, soil/dredge spoil areas, or related land conversion activities. It is recommended that the proposed project be considered in conjunction with other existing or planned projects so as to minimize stormwater runoff on nearby waterways and

other natural resources. As with the Erosion and Sediment Control Plan requirement (above), the Army is ultimately responsible for achieving project compliance through oversight of on-site contractors, regular field inspection, prompt action against non-compliance, and/or other mechanisms consistent with Army policy. For stormwater management plans, the Army is encouraged to contact the Department of Conservation and Recreation to obtain plan development or implementation assistance so as to ensure project compliance during and after construction. The project should be considered in conjunction with any other existing or proposed land use conversion or expansion plans for the property in order to adequately address the cumulative impacts upon the receiving drainage, as well as to identify appropriate strategies for reducing the non-point source pollution from the developed and developing areas of the site. See "Regulatory and Coordination Needs," item A.3, below.

(c) VPDES Stormwater General Permit. Projects involving land disturbance of one acre or more (2,500 square feet in a Chesapeake Bay Preservation Area) are also subject to the requirements of the Virginia Pollutant Discharge Elimination System (VPDES) Stormwater Permit for Construction Activities. See "Regulatory and Coordination Needs," item A.4, below.

7. Chesapeake Bay Preservation Areas. Development projects in both Forts are subject to the requirements applicable to Resource Protection Areas (RPAs) and/or Resource Management Areas (RMAs) administered by the Department of Conservation and Recreation's Division of Chesapeake Bay Local Assistance (DCR-DCBLA). See "Federal Consistency…," item 2, below for details. In addition, DCR-DCBLA offers the following guidance applicable to federal projects in the Chesapeake Bay watershed.

(a) 1998 Federal Agencies' Chesapeake Ecosystem Unified Plan. This plan (hereinafter "Unified Plan") requires its signatories, including the Department of the Army, to cooperate fully with local and state governments in carrying out voluntary and mandatory actions to comply with the management of stormwater. In the Unified Plan, the agencies also committed themselves to encouraging construction design that accomplishes the following:

a) minimizes natural area loss on new and rehabilitated federal facilities;

b) adopts low-impact development and best management technologies for stormwater, sediment, and erosion control, and reduces impervious surfaces; and

c) considers the Conservation Landscaping and Bay-Scapes Guide for Federal Land Managers.

(See Unified Plan, page 3, "Supporters of Smart Growth" commitments, items 4 and 5.)

(b) Chesapeake 2000 Agreement. DCR-DCBLA indicates that the *Chesapeake 2000 Agreement* commits its signatories, including the federal government, to lead by example with respect to controlling nutrient, sediment, and chemical contaminant runoff from government properties. Agencies are also responsible for specific commitments in this regard, under Directive No. 01-1, "Managing Storm Water on State, Federal, and District-owned Lands and Facilities" issued by the Chesapeake Executive Council in December 2001. These commitments include leading by example with respect to stormwater control.

8. Mineral Resources. According to the Department of Mines, Minerals, and Energy, the proposed activities at Forts Lee and A. P. Hill will not give rise to impacts upon mineral resources.

9. Forest and Tree Protection. According to the Department of Forestry, the proposed activities will not give rise to significant impacts upon the forests of the Commonwealth.

In order to protect trees in the project area from the effects of construction activities associated with this project, the proponent should mark and fence them at least to the dripline or the end of the root system, whichever extends farther from the tree stem. Marking should be done with highly visible ribbon so that equipment operators see the protected areas easily.

Parking and stacking of heavy equipment and construction materials near trees can damage root systems by compacting the soil. Soil compaction, from weight or vibration, affects root growth, water and nutrient uptake, and gas exchange. The protection measures suggested above should be used for parking and stacking as well as for moving of equipment and materials. If parking and stacking are unavoidable, the Army should use temporary crossing bridges or mats to minimize soil compaction and mechanical injury to plants.

Any stockpiling of soil should take place away from trees. Piling soil at a tree stem can kill the root system of the tree. Soil stockpiles should be covered, as well, to prevent soil erosion and fugitive dust.

Questions on tree protection may be directed to the Department of Forestry (Todd Groh, telephone (434) 977-1375, extension 3344).

10. Natural Area Preserves. According to the Department of Conservation and Recreation, there are no state Natural Area Preserves in the vicinity of either Fort Lee or Fort A. P. Hill.

11. Pollution Prevention. DEQ advocates that principles of pollution prevention be used in all construction projects as well as in facility operations. Effective siting, planning, and on-site Best Management Practices (BMPs) will help to ensure that environmental impacts are minimized. However, pollution prevention techniques also include decisions on construction materials, design, and operational procedures that will facilitate the reduction of wastes at the source. We have several pollution prevention recommendations that may be helpful in constructing or operating the projects under consideration:

- Consider development of an Environmental Management System (EMS) for each Fort. An effective EMS will ensure that the Army is committed to minimizing its environmental impacts, setting environmental goals, and achieving improvements in its environmental performance at the two Forts in question. DEQ offers EMS development assistance and recognizes facilities with effective Environmental Management Systems through its Virginia Environmental Excellence Program.
- Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered and can be specified in purchasing contracts.
- Consider contractors' commitments to the environment (such as an EMS) when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals.
- Choose sustainable materials and practices for infrastructure and building construction and design. These could include asphalt and concrete containing recycled materials, and integrated pest management in landscaping, among other things.
- Integrate pollution prevention techniques into facility maintenance and operation, to include the following: inventory control (record-keeping and centralized storage for hazardous materials), product substitution (use of non-toxic cleaners), and source reduction (fixing leaks, energy-efficient HVAC and equipment). Maintenance facilities should be

designed with sufficient and suitable space to allow for effective inventory control and preventive maintenance.

DEQ's Office of Pollution Prevention provides information and technical assistance relating to pollution prevention techniques and EMS. If interested, the Army may contact that Office (Tom Griffin, telephone (804) 698-4545).

B. Comments Applicable to Fort Lee

1. Natural Heritage Resources. According to the Department of Conservation and Recreation, the southern section of the project area (the Ammunition Supply Point) may support appropriate habitat for Virginia thistle, and bald eagle nesting sites have been documented in the vicinity of Fort Lee project sites.

(a) Virginia Thistle. Virginia thistle (*Cirsium virginianum*, G3/S2/NL/NL), a rare biennial herb, inhabits open pine barrens, sandy, wet swales, and savannas (Weakley, in prep.). This species has also been documented in such disturbed areas as roadside ditches, and powerline and railroad rights-of-way (TNC, 1996). This plant produces purple flowers from August to October (Radford et al., 1968). Virginia thistle is currently known from 24 locations in Virginia's coastal plain and piedmont regions, 15 of which are historic.

(b) Bald Eagle. Bald Eagle nest sites (*Haliaeetus leucocephalus*, G5/S2S3B,S3N/LT/LT) have been documented within the vicinity of the Fort Lee project sites. Bald Eagle nest sites are often found in the midst of large wooded areas near marshes or other bodies of water (Byrd, 1991). Bald Eagles feed on fish, waterfowl, seabirds (Campbell et. al., 1990), various mammals and carrion (Terres, 1980). Threats to this species include human disturbance of nest sites (Byrd, 1991), habitat loss, biocide contamination, decreasing food supply and illegal shooting (Herkert, 1992). Please note that this species is currently classified as threatened by the United States Fish and Wildlife Service (USFWS) and the Virginia Department of Game and Inland Fisheries (DGIF).

However, the Department of Conservation and Recreation (DCR) is aware that the nests are currently abandoned and that coordination with USFWS has resulted in an agreement to exempt Fort Lee from the third year of protection (see Draft EIS, page 4-57). DCR recommends that coordination with USFWS and DGIF continue as needed; see "Regulatory and Coordination Needs," item B.3., below.

2. Wildlife Resources.

(a) Habitat. According to the Department of Game and Inland Fisheries (DGIF), the projects at Fort Lee are not proposed to directly affect any wetlands or streams. However, according to the Draft EIS, large amounts of contiguous woodlands will be lost (see page 4-63). This will have a significant adverse impact upon forest-dependent wildlife species. Projects at Fort Lee will also result in as much as 100 acres of additional impervious surfaces. This could result in significant adverse impacts to aquatic resources from increased erosion and stormwater runoff.

(b) Listed Species. According to the Draft EIS, areas which once supported breeding loggerhead shrikes have been destroyed (page 4-57). In the judgment of DGIF, this is truly unfortunate for the conservation of this state-listed threatened species. DGIF requests the Army's cooperation to ensure that other rare species (i.e., the American kestrel and the black and white warbler; see Draft EIS, page 4-61) do not suffer the same fate.

DGIF does not anticipate significant adverse impacts upon active bald eagle nests because there are no confirmed nests on Fort Lee. However, it is possible that a new eagle nest might be encountered close to a project site; immediate coordination by the Army is necessary in such a case. See "Regulatory and Coordination Needs," item A.6, below.

(c) Recommendations. In addition to the mitigation measures in the Draft EIS (page 4-63), the Department of Game and Inland Fisheries recommends the following measures to mitigate adverse impacts upon fish and wildlife resources:

(i) Re-vegetation. Currently landscaped areas (i.e., those areas consisting of lawns) throughout the Fort should be evaluated for possible re-vegetation using native trees, shrubs, and herbaceous plants. Even small patches or strips of woodland or meadow may provide habitat features for a diversity of wildlife species. These patches could then be linked to create wildlife corridors.

(ii) Stormwater Controls. Stormwater controls should be designed to replicate and maintain the hydrographic condition of the site prior to the change in landscape. This should include, but not be limited to, using of bio-retention areas and pervious pavers, and minimizing the use of curb and gutter in favor of grasses swales. These and other "low-impact development" components are designed to capture stormwater runoff as close to the source as

possible, allowing it to infiltrate into the soil. This filters pollutants and reduces stormwater runoff volumes, benefiting natural resources.

(iii) Unavoidable Stream and Wetland Impacts. Unavoidable wetland or stream impacts should be compensated, based on the following ratios:

- For loss of palustrine forested wetlands (PFO): 2:1 compensation
- For loss of palustrine scrub-shrub wetlands (PSS): 1.5:1
- For loss of palustrine emergent wetlands (PEM): 1:1.

In addition, stream impacts should be compensated at a ratio of 1:1, based on full restoration of a similarly functioning stream.

(iv) Riparian Buffers. To the fullest extent possible, undisturbed riparian buffer zones of at least 100 to 200 feet in width should be preserved along streams.

3. Threatened and Endangered Plant and Insect Species. According to the Department of Agriculture and Consumer Services, there are no documented state-listed endangered or threatened plant or insect species in the project areas at Fort Lee.

4. Agricultural Lands. The projects at Fort Lee will not adversely affect the responsibilities of the Department of Agriculture and Consumer Services with respect to preservation of agricultural lands.

5. Solid and Hazardous Waste: Contamination at Fort Lee.

(a) Listings. According to DEQ's Waste Division, Fort Lee is listed in two ways:

- under DEQ's Federal Facilities Installation Restoration Program (identification number VA7210020502); and

- as a RCRA (Resource Conservation and Recovery Act) large-quantity generator of hazardous waste (US Army CASCOM and Fort Lee, identification number VA7210020502).

(b) Information and Analysis. Fort Lee contains a number of active and closed sites as defined in the environmental restoration program (ERP). The Draft EIS makes reference to the *Fort Lee Installation Action Plan* that is used to

track ERP sites. While the proposed construction activities do not appear to be located where they would affect remedies in place, it would be helpful for the Army to show a figure depicting the proposed action in relation to ERP sites. The widespread and sporadic construction plans outlined in the Draft EIS make it difficult to track the extent of impact each project may have on a particular ERP site. See "Regulatory and Coordination Needs," item B.1.(a), below, for coordination relative to the Army's obligations under CERCLA (the Comprehensive Environmental Response, Compensation, and Liability Act).

6. Water Supply. According to the Department of Health's Office of Drinking Water, significant population increases at Fort Lee will create challenges for waterworks in the future. See "Regulatory and Coordination Needs, item A.5., below. Judgments of infrastructure capacity will be made after receipt of applications for system improvements (Douglas/Ellis, 11/27/06).

DEQ's Division of Water Resources indicates that current suppliers to Fort Lee, the Virginia American Water Company and the Appomattox River Water Authority, have sufficient capacity to accommodate increased demands.

7. Historic Structures and Archaeological Resources. The Department of Historic Resources has previously expressed its serious concerns about potential "long-term significant adverse effects" of proposed activities upon cultural resources in the vicinity of Fort Lee, specifically the Petersburg National Battlefield. The Department recommends that the Army continue to consult with the Department and also the National Park Service in this regard. See "Regulatory and Coordination Needs," item B.2., below.

The Virginia Council on Indians supports the recommendations for mitigation of effects on cultural resources, including fencing of archaeological sites 44PG160, 44PG195, 44PG196, 44PG197, and 44PG299 during nearby construction activities (Draft EIS, page 4-70, "Mitigation" heading). The Council has asked for further information, however, regarding the first four of these sites.

8. Transportation: Road Use. The Department of Transportation has completed a preliminary traffic study for the Fort Lee expansion, and has concluded that major road and intersection improvements will be required to handle the traffic resulting from the development at Fort Lee. VDOT states that the estimated cost of providing acceptable levels of service will range from $30 million to $40 million. VDOT recommends that the Final EIS address the traffic improvements recommended by VDOT's final traffic analysis.

The City of Hopewell indicates that transportation impacts upon the City, listed in the Draft EIS as "short- and long-term significant and adverse (page ES-7, Table ES-2), are likely one of the most significant adverse impacts of the Fort Lee development upon the neighboring City. Accordingly, the City urges the Army to implement the mitigation measures listed in the Draft EIS (page 4-104), and to continue working with the Tri-Cities Metropolitan Planning Organization (MPO), staffed by the Crater Planning District Commission, to set priorities for off-post transportation needs caused by the expansion of the Fort. See "Regulatory and Coordination Needs," item B.4, below.

Prince George County recommends additional review of the traffic study methodology used in the Draft EIS, so that conclusions regarding traffic impacts on the surrounding region have a better basis.

9. Stormwater Management. According to Prince George County, the Draft EIS addresses the increased drainage to Bailey's Creek, stating that Best Management Practices (BMPs) will be used to control erosion and runoff (see Draft EIS, pages 4-41 through 4-44, section 4.1.6.1.3). The County indicates that because the Fort is the headwaters of Bailey's Creek, an increase in runoff from the Fort, attributable to its development, could exacerbate bank erosion and flooding. The Draft EIS is not specific on where stormwater ponds and related facilities would be placed, although it does recommend high-density housing, permeable pavement, and BMPs. The County suggests that several large ponds could be constructed to control downstream flooding and erosion, and provide recreation opportunities as well.

The County recommends that examination of the current condition of Bailey's Creek be undertaken to determine the extent to which increased runoff will affect downstream properties.

10. Water Quality.

(a) Impaired Waters. DEQ's Piedmont Regional Office notes that Bailey Creek, Harrison Creek, and Blackwater Swamp are listed as impaired waters pursuant to section 303(d) of the Clean Water Act (Draft EIS, page 4-38, Table 4.1.6-3). Once a water body is listed as impaired, a Total Maximum Daily Load (TMDL) must be developed to address and reduce pollutant loads entering the stream or river. DEQ recommends that the Army undertake efforts to minimize adverse impacts on streams; these efforts should include proper maintenance of erosion and sediment controls (see item A.6., above) as well as maximizing pervious surfaces and green spaces in the construction design.

(b) Permitting. A VPDES stormwater general permit for construction activities will be required; see "Regulatory and Coordination Needs," item A.4., below. In addition, any construction activity adversely affecting wetlands or water quality may require a Virginia Water Protection Permit; see "Regulatory and Coordination Needs," item B.5., below.

11. Wastewater Treatment. The City of Hopewell confirms the statement in the Draft EIS to the effect that the City anticipates the need to move its wastewater treatment activity from the primary treatment plant to a regional facility as demand increases (Draft EIS, page 4-105). The Draft EIS states that the regional system has capacity to treat the wastewater from Fort Lee. However, the City indicates that the Army should provide a time line outlining the progression of the increasing wastewater treatment demand, thereby giving the City time for planning and implementation of a move to the regional facility. The City supports the use of water-conserving devices as proposed in the mitigation measures discussion (page 4-107).

Prince George County indicates that the Draft EIS does not address actual wet weather flows from Fort Lee through the Bailey's Creek interceptor. The Fort has a flow meter that measures the amount of wastewater leaving the Fort Lee collection system; the Draft EIS should have included wet weather flows (see pages 4-105 and 4-106), in order to indicate the effect of the increased flow on the treatment facility in Hopewell. In addition, the Draft EIS does not mention the capacity in the Bailey's Creek interceptor that takes the wastewater from the Fort to the City's primary treatment plant. Use of this capacity by the Fort may affect other users of the interceptor.

12. Local and Regional Comments.

(a) Crater Planning District Commission. The Commission is a cooperating agency with respect to the Draft EIS, with emphasis on Fort Lee. The Commission attended the October 26, 2006 public meeting, and is in general agreement with the alternatives and analysis presented in the Draft EIS. Commission staff will continue to work with the Army and local communities to pursue solutions to the challenges presented in the Draft EIS.

(b) School Systems Impacts. Both the City of Hopewell and Prince George County expressed concern that local school systems must accommodate increased student populations attributable to the growth in personnel at Fort Lee, and that estimates of student numbers, time frames for provision of additional facilities, and other information did not appear in the Draft EIS. As with the

wastewater treatment improvements, the City urges that the Army begin discussions with school systems and provide time lines for anticipated changes.

(c) Other Matters. Prince George County pointed out a number of corrections and information deficiencies in the Draft EIS as it relates to Fort Lee.

C. Comments Applicable to Fort A. P. Hill

1. Natural Heritage Resources: All Project Sites.

(a) Small Whorled Pogonia. The Department of Conservation and Recreation indicates that project activities at any of the sites at Fort A. P. Hill may affect the small whorled pogonia, a state-listed protected plant. This plant grows in a variety of woodland habitats in Virginia, but tends to favor mid-aged woodland habitats on gently north or northeast facing slopes often within small draws. It is quite natural for plants of this species to remain dormant in the soil for long periods of time. Direct destruction, as well as habitat loss and alteration, are principal reasons for the decline of the species (Ware, 1991). This species is currently classified as threatened by the United States Fish and Wildlife Service (USFWS) and as endangered by the Virginia Department of Agriculture and Consumer Services (VDACS). See also item C.3., below.

(b) Reptiles and Amphibians. DCR indicates that a study of reptiles and amphibians at Fort A.P. Hill was conducted by Steve Roble and Joseph C. Mitchell in 1998. The study, entitled *Annotated Checklist of the Amphibians and Reptiles for Fort A. P. Hill, Virginia and Vicinity*, indicated that the following rare species were found:

Rainbow snake, *Farancia erytrogramma erytrogramma* (G5/S3/NL/NL)
Carpenter frog, *Rana virgitipes* (G5/Se/NL/SC)
Lesser siren, *Siren intermedia intermedia* (Gr/S2/NL/NL).

With regard to information needed on reptiles and amphibians (Draft EIS, page 4-159), DCR recommends that the Army review the above study.

(c) Mount Creek Slopes Conservation Site. According to the information in DCR files, Pender Camp Forward Operating Bases (FOBs) # 1-6 and 8 have been documented within the Mount Creek Slopes Conservation Site (also see Draft EIS, page 4-158). Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action

because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain. The rating is on a scale of 1-5, 1 being most significant. Mount Creek Slopes Conservation Site has been given a biodiversity significance ranking of B4, which represents a site of general significance. The natural heritage resources of concern at this site are the basic mesic forest and the mixed mesic hardwood forest.

(d) Basic Mesic Forest. According to the Department of Conservation and Recreation, basic mesic forest communities occur on deep, well-drained, basic or circumneutral soils on lower slopes, north-facing slopes, and ravines in the Piedmont and Coastal Plain regions (Schafale and Weakley, 1990). In the Coastal Plain, this basic soil may be produced by outcrops of marl or deposits of basic alluvium (Schafale and Weakley, 1990). The canopy tends to be a mixture of mesophytic trees such as American beech (*Fagus grandifolia*), southern sugar maple (*Acer barbartum*), white ash (*Fraxinus americana*), tulip tree (*Liriodendron tulipifera*), and oak (*Quercus* spp.). Understory trees may include hop hornbeam (*Ostrya virginiana*), eastern redbud (*Cercis candensis*), and paw-paw (*Abimina triloba*). The shrub layer is typically well developed. The herb layer is dense and very diverse with black bugbane (*Cimicifuga racemosa*), beggar lice (*Desmodium pauciflorum*), horse-blam (*Collinsonia canadensis*), common eastern brome grass (*Bromus pubescens*), and many other species often represented (Van Alstine et al, 1999). Basic mesic forest communities are threatened by logging, invasion by exotic species, and infestations of the gypsy moth.

(e) Mesic Mixed Hardwood Forest. Mesic mixed hardwood forest communities occur on deep, well-drained, acidic soils on lower slopes, steep north-facing slopes, ravines, and occasionally well-drained small stream bottoms throughout the Piedmont and Coastal Plain regions (Schafale and Weakley, 1990). The canopy layer is dominated by mesophytic trees such as white oak (*Quercus alba*), red oak (*Quercus rubra*), red maple (*Acer rubrum*), beech (*Fagus grandifolia*), and tulip tree (*Liriodendron tulipifera*. The understory often consists of flowering dogwood (*Cornus florida*), hop hornbeam (*Ostrya virginiana*), and holly (*Ilex opaca*). The shrub and herb layers also tend to be moderately dense and diverse, though they can be sparse in heavily shaded areas (Schafale and Weakley, 1990). Mesic mixed hardwood forest communities are threatened by logging, livestock grazing, and infestation by the gypsy moth.

(f) Recommendations by DCR. The Department of Conservation and Recreation recommends avoidance of project areas with steep slopes and ravines due to potential for these sites to support the basic mesic forest (item (d), above) and the mixed hardwood forest (item (e), above), which are two significant natural communities.

2. Natural Heritage Resources: Explosive Ordnance Disposal (EOD) Sites. All EOD project sites may have appropriate habitat to support the treetop emerald and Southern sprite.

(a) Treetop Emerald. The treetop emerald (*Somatochlora provocans*, G3G4/S2/NL/NL), a rare state dragonfly, measures 53-56 mm in length. This brilliantly colored (Needham and Westfall, 1975) species inhabits forest or boggy seepages with a lot of herbaceous vegetation and breeds in the headwaters of small streams (TNC, 1996).

(b) Southern Sprite. The southern sprite (*Nehalennia integricollis),* G5/S1S2/NL/NL), a small damselfly species with a mainly southern distribution, occurs throughout the coastal plain. It is usually found at the edges of grassy ponds, lakes, marshes, and bogs (Lam, Ed, 2004), and seen mostly perching down among grass and sedge stems, often near shore of a lake. Collections have indicated that the Southern sprite has two generations a year, with peaks in abundance in April-May, and August-September (Dunkle, Sidney W., 1990).

(c) Odonates. Adult Odonata (dragonflies and damselflies), commonly seen flitting and hovering along the shores of most freshwater habitats, are accomplished predators. Adults typically forage in clearings with scattered trees and shrubs near the parent river. They feed on mosquitoes and other smaller flying insects, and are thus considered highly beneficial. Odonates lay their eggs on emergent vegetation or debris at the water's edge. Unlike the adults, the larvae have an aquatic larval stage where they typically inhabit the sand and gravel of riffle areas. Wingless and possessing gills, they crawl about the submerged leaf litter and debris stalking their insect prey. The larvae seize unsuspecting prey with a long, hinged "grasper" that folds neatly under their chin. When larval development is complete, the aquatic larvae crawl from the water to the bank, climb up the stalk of the shoreline vegetation, and the winged adult emerges (Terwilliger 1991, Thorpe and Covich 1991). Because of their aquatic lifestyle and limited mobility, the larvae are particularly vulnerable to shoreline disturbances that cause the loss of shoreline vegetation and siltation. They are also sensitive to alterations that result in poor water quality, aquatic substrate changes, and thermal fluctuations.

3. Natural Heritage Resources: Forward Operations Base (FOB) Sites.

(a) Rappahannock Spring Amphipod. FOB sites 4, 6, and 7 may have appropriate habitat to support the Rappahannock spring amphipod (*Stygobromus sp. 21,* G1G2/S1S2/NL/NL). The Rappahannock spring amphipod, a small shrimp-like freshwater crustacean, has a segmented and laterally flattened body that contains the head, the thorax, and the abdomen. The amphipod breeds from March through November. It lives in permanent tubes constructed from sand grains and debris. Its tubes can be deeper than two inches. Amphipods live in both shallow and deep water as long as there is good water flow.

(b) Recommendations by DCR. Due to the potential for this site to support small whorled pogonia, treetop emerald, Rappahannock spring amphipod, and Southern sprite, DCR recommends an inventory for the resources in the study area. With the survey results, the Department's Division of Natural Heritage can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources.

4. Threatened and Endangered Plant and Insect Species. Pursuant to the Agreement mentioned above (see item A.3.), the Department of Agriculture and Consumer Services indicates that suitable habitat for protected species should be surveyed prior to construction activity in order to identify potential impacts to these species. The habitat should be predominantly forested areas.

5. Wildlife Resources.

(a) Habitat. While direct effects upon wetlands are not proposed at Fort A. P. Hill, large areas of land will be disturbed, according to the Department of Game and Inland Fisheries. The proposed logistics support area is currently disturbed, but the proposed explosive ordnance training site is approximately 1,200 acres of predominantly undisturbed forested land (Draft EIS, page 4-121). That project, in particular, has the potential to result in adverse impacts upon wildlife.

Ware Creek, in the vicinity of the proposed logistics support area, is a Confirmed Anadromous Fish Use Area. For this reason, DGIF recommends appropriate measures to minimize adverse impacts; see item C.5.(c), below.

(b) Listed Species. The Draft EIS mentions avoidance of the primary (250 yards) and secondary (440 yards) protection zones around a bald eagle nest (page 4-167). Given this avoidance, the Department of Game and Inland

Fisheries does not anticipate a significant adverse impact upon the eagles using that nest. However, as is the case at Fort Lee (see item B.2.(b), above), it is possible that a new eagle nest might be encountered close to a project site; immediate coordination by the Army is warranted in such a case. See "Regulatory and Coordination Needs," item A.6, below.

The Army lists the wood turtle as likely to occur at Fort A. P. Hill (Draft EIS, page 4-160, third paragraph). According to DGIF, wood turtles are not currently known in any eastern Virginia counties south of Fairfax.

(c) Recommendations. To mitigate potential impacts of the project upon fish and wildlife resources, the Department of Game and Inland Fisheries has the following recommendations. These are similar to the mitigation measures proposed in the Draft EIS for Fort Lee (page 4-63; see item A.2.(c), above).

(i) Limit Land Disturbance. Land disturbance on each parcel should be no more than what is necessary for the desired use.

(ii) Riparian Buffers. To the fullest extent possible, undisturbed riparian buffer zones of at least 100 to 200 feet in width should be preserved along streams.

(iii) Re-vegetate Disturbed Areas. Disturbed areas should be re-vegetated with native, indigenous vegetation. (See the specific ideas for Fort Lee, above, item B.2.(c)(iii).)

(iv) Limit Staging Areas. Place contractor staging and mobilization areas inside construction footprints.

(v) Protect Sensitive Areas. Place protective fencing or signage around environmentally sensitive areas such as wetlands, streams, or steep slopes.

(vi) Adhere to Erosion Controls. Follow erosion and sediment control measures strictly.

(vii) Compensate for Unavoidable Stream and Wetland Impacts. Unavoidable wetland or stream impacts should be compensated, based on the following ratios:

- For loss of palustrine forested wetlands (PFO): 2:1 compensation
- For loss of palustrine scrub-shrub wetlands (PSS): 1.5:1

- For loss of palustrine emergent wetlands (PEM): 1:1.

In addition, stream impacts should be compensated at a ratio of 1:1, based on full restoration of a similarly functioning stream.

DEQ's Northern Virginia Regional Office regulates wetland impacts. Mitigation measures stipulated by DEQ as conditions of its Virginia Water Protection Permit or section 401 water quality certification that are more stringent than measures recommended by DGIF supersede DGIF recommendations.

(d) Consultation. The Draft EIS states that the Army will continue to consult with the Department of Conservation and Recreation's Division of Natural Heritage relative to state and federally listed endangered, threatened, and rare species. The Department of Game and Inland Fisheries requests that this consultation effort be expanded to include DGIF as well, since DGIF has legal and regulatory jurisdiction over all fish and wildlife resources in Virginia, excluding listed insects (item A.2.(a), above). See also "Regulatory and Coordination Needs," item A.6., below.

6. Solid and Hazardous Waste: Contamination at Fort A. P. Hill.

(a) Listings. According to DEQ's Waste Division, Fort A. P. Hill is listed as follows:

- On the EPA CERCLIS list (identification number VA2210020416);

- As a large-quantity generator (LQG) of hazardous waste, and a former treatment, storage, and disposal (TSD) facility.

Fort A. P. Hill is not on the National Priorities List (NPL).

(b) Nearby Facilities. The following solid waste facilities are in the vicinity of Fort A. P. Hill:

- Caroline County Landfill (permit GW 182 Sanitary LF);

- Caroline County Landfill (permit SWP 147, closed Sanitary LF);

- Caroline County Landfill (permit SWP 182, closed Sanitary LF);

- U.S. Army, Fort A. P. Hill (permit SWP 332, closed Sanitary LF); and

- U.S. Army, Fort A. P. Hill (permit SWP 393, closed CDD LF.

(c) Formerly Used Defense Site (FUDS). According to DEQ's Waste Division, a total of five parcels from Fort A. P. Hill, totaling 1,271.34 acres, were disposed of by the Defense Department between 1953 and 1985. All of these parcels are located around the perimeter of the active installation. The nearest FUDS parcel is at least 3 miles away from the proposed project areas.

The Department of Defense indicates that there is no known or suspected ordnance or hazardous waste on these FUDS parcels. However, DEQ's Waste Division has not investigated the assertion, and can neither support nor contradict the assertion.

(d) Waste Compliance. DEQ's Northern Virginia Regional Office indicates that the description of the Army's handling of solid and hazardous waste is adequate, provided all applicable state and federal regulations are followed.

(e) Recommendation. DEQ's Northern Virginia Regional Office recommends that the Army promote the beneficial re-use or recycling of construction and demolition debris by sending material slated for off-site disposal to a material recovery facility.

7. Water Supply. According to DEQ's Division of Water Resources, Fort A. P. Hill relies on groundwater for its water supply. Groundwater development in the area is limited, and there are few high-production wells. The area is not a groundwater management area, and development of new wells does not require permits at this time. However, the northern coastal plain, east of Interstate Route 95, is under consideration to be designated as a groundwater management area, in which case permits for new wells would be required. See "Regulatory and Coordination Needs," item C.1., below, in order to keep informed on developments in this regard.

DEQ's Division of Water Resources notes that the Army lists low-flow plumbing fixtures at all new buildings as a mitigation measure for water demands from the proposed projects.

8. Transportation: Road Use Impacts. According to the Department of Transportation (VDOT), the use of buses for four days of training for approximately 800 troops every week would involve 20 to 25 buses. According to VDOT, this traffic addition would not have an appreciable effect on road facilities in the vicinity of Fort A. P. Hill.

9. Cultural Resources.

(a) Phase 1 Survey Request. The Virginia Council on Indians requests a copy of the Phase I survey mentioned in the Draft EIS (page 4-170, first full paragraph) on the acreage considered the most likely for previous habitation, when the survey becomes available. In addition, the Council requests additional information obtained from further evaluation of archaeological sites. See "Regulatory and Coordination Needs," item C.2., below.

(b) Rappahannock Tribe. The Council on Indians recommends that the Army keep the Rappahannock Tribe, in whose aboriginal territory Fort A. P. Hill lies, apprised of findings of any pre-historic archaeological sites.

Federal Consistency under the Coastal Zone Management Act

The Draft EIS included a federal consistency determination (Appendix D, pages D-6 through D-8).

Pursuant to the Coastal Zone Management Act of 1972, as amended, federal activities located inside or outside of Virginia's designated coastal management area that can have reasonably foreseeable effects on coastal resources or coastal uses must, to the maximum extent practicable, be implemented in a manner consistent with the Virginia Coastal Resources Management Program (VCP). The VCP consists of a network of programs administered by several agencies. The DEQ coordinates the review of federal consistency determinations with agencies administering the Enforceable and Advisory Policies of the VCP.

DEQ published notice of this review on its web site from November 8 through November 16, 2006. No comments were received from the public.

The comments which follow address the application of enforceable policies of the Virginia Coastal Resources Program to the projects considered in the Draft EIS and the federal consistency determination.

1. Fisheries Management. The Department of Game and Inland Fisheries states that these projects are consistent with the fisheries management enforceable policy of the Virginia Coastal Resources Management Program provided that the Army, in carrying out the projects, adheres strictly to erosion and sediment control requirements, provides adequate stormwater controls, and provides for undisturbed riparian buffer areas 100 to 200 feet wide. See "Environmental Impacts and Mitigation," items B.2. and C.5, above.

2. Coastal Lands Management. According to the Department of Conservation and Recreation's Division of Chesapeake Bay Local Assistance, the Chesapeake Bay Preservation Act (*Virginia Code* sections 10.1-2100 et seq., hereinafter "Bay Act") and the Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 10-20-10 et seq., hereinafter "Regulations") define Resource Protection Areas (RPAs) and Resource Management Areas (RMAs), and strictly control land disturbance activities in the former.

(a) Resource Protection Areas. RPAs include the following areas within the defined Chesapeake Bay watershed, according to the Regulations:

- tidal wetlands
- non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or to perennial water bodies;
- tidal shores
- highly erodible soils, and
- lands within a 100-foot buffer located adjacent to and landward of the aforementioned features, and along both sides of any water body with perennial flow.

Non-water-dependent activities are prohibited within areas analogous to RPAs.

(b) Resource Management Areas. RMAs are defined as the areas landward of RPAs, according to local ordinance -- 150 feet in Prince George County (for Fort Lee) and 300 feet in Caroline County (for Fort A. P. Hill).

(c) Requirements. Proposed activities and projects in both Forts must adhere to the following, if they are proposed in RMAs:

- the general performance criteria of the Regulations (9 VAC 10-20-120);

- stormwater management criteria consistent with water quality protection provisions (4 VAC 3-20-71) of the Virginia Stormwater Management Regulations (4 VAC 3-20 et seq.); and

- the requirements of the *Virginia Erosion and Sediment Control Handbook* (DCR, Third Edition, 1992).

In addition, proposed activities and projects in both Forts must also comply with the Development Criteria for Resource Protection Areas if they are proposed for RPAs; see the Regulations (9 VAC 10-20-130).

See also "Environmental Impacts and Mitigation," item A.7, above.

3. Non-point Source Pollution Control. See "Environmental Impacts and Mitigation," item A.6(a), above and also "Regulatory and Coordination Needs," item A.3, below.

4. Subaqueous Lands Management. See "Regulatory and Coordination Needs," item A.2, below.

Regulatory and Coordination Needs

A. Guidance Applicable to both Fort Lee and Fort A. P. Hill

The following guidance on regulatory and/or coordination needs applies to activities likely to take place at both Forts. Guidance applicable only to one Fort is presented in parts B and C, below.

1. Air Quality Regulation. Permits may be needed for fuel-burning equipment used during construction of these projects, as well as fuel-burning equipment used for heating and cooling the new buildings. The appropriate regional office of DEQ should be contacted to inquire about permitting needs. The same Office should be contacted to determine whether an open burning permit is required under the Regulations for the Control and Abatement of Air Pollution (9 VAC 5-40-5600 et seq.). These offices are:

- For activities at Fort Lee: DEQ's Piedmont Regional Office (James Kyle, Air Permits Manager, telephone (804) 527-5047) should be contacted; or

- For activities at Fort A. P. Hill: DEQ's Northern Virginia Regional Office (Mr. Terry Darton, Air Permits Manager, telephone (703) 583-3845) should be contacted.

2. Subaqueous Lands Encroachment. If any of the project activities should encroach upon state-owned subaqueous lands, a permit may be required from the Marine Resources Commission. In that case, the Army must submit a Joint Federal-State Permit Application (JPA) with the Commission. Questions on this potential requirement, and requests for the form, may be directed to the Commission (Ben Stagg, telephone (757) 247-2200).

3. Erosion and Sediment Control; Stormwater Management. As mentioned above ("Environmental Impacts and Mitigation," item A.6(a)), projects

involving land disturbance may require a Stormwater Management Plan pursuant to the Stormwater Management Law (*Virginia Code* section 10.1-603) (for projects involving land disturbance of 1 acre or more) and/or an Erosion and Sediment Control Plan pursuant to the Erosion and Sediment Control Law (*Virginia Code* sections 10.1-560 et seq.) (for projects involving land disturbance of 2,500 square feet or more in Chesapeake Bay Preservation Areas). Questions regarding both of these requirements may be directed to the appropriate Watershed Office of the Department of Conservation and Recreation:

- For activities at Fort Lee: James East Watershed Office (Andrew Lowe, telephone (804) 225-2994); or

- For activities at Fort A. P. Hill: York-Rappahannock Watershed Office (Matt Criblez, telephone (804) 443-6752.

4. VPDES Stormwater Management General Permit. To obtain coverage under the VPDES Stormwater General Permit for Construction Activities, or to inquire about the requirements of this general permit, the Army should contact the Department of Conservation and Recreation's Division of Soil and Water Conservation (Eric Capps, telephone (804) 786-3957).

5. Water Supply Facilities. For information on waterworks capacity and permitting requirements, the Army should contact the appropriate Field Office of the Department of Health's Office of Drinking Water:

- For water supply facilities serving Fort Lee: Southeast Virginia Field Office, 830 Southampton Avenue, Room 2058, Norfolk, 23510 (telephone (757) 683-2000); or

- For water supply facilities serving Fort A. P. Hill: Culpeper Field Office, 400 South Main Street, 2nd floor, Culpeper, 22701 (telephone (540) 829-7340).

6. Wildlife Protection. In order to ensure compliance with federal and state protected species legislation, the Army is requested to coordinate immediately with the Department of Game and Inland Fisheries (Andy Zadnik, telephone (804) 367-2733) in the event bald eagle nests are discovered at either Fort Lee or Fort A. P. Hill.

B. Guidance Applicable to Fort Lee

In addition to the regulatory guidance above (see "Regulatory and Coordination Needs, items A.1. through A.6.), the Army should be aware of the following guidance applicable to Fort Lee.

1. Contamination.

(a) Remediation. DEQ's Waste Division, Federal Facilities Restoration Program recommends that if the preferred alternative is chosen, the Army contact Mr. Hank Hennigar (telephone (804) 734-5068), or the Fort's designated remedial project manager, for information on the CERCLA obligations at the active and closed ERP sites at the Fort. This contact should precede the beginning of any land, soil, or groundwater disturbance at or near ERP sites, so as to ensure that all remedies in place remain intact and that long-term monitoring wells are not disturbed.

General questions regarding management of solid or hazardous waste may be directed to DEQ's Piedmont Regional Office (Rob Timmins, telephone (804) 527-5161).

(b) Petroleum Contamination. In the event petroleum contamination is discovered during project excavation, the incident should be reported to DEQ's Piedmont Regional Office (telephone (804) 527-5020). Disposal of any contaminated soils and groundwater should be accomplished in accordance with applicable DEQ guidelines. Questions on this matter may be addressed to DEQ's Piedmont Regional Office (Lisa Elizardo, telephone (804) 527-5199).

(c) Personal Safety. Personal safety concerns relating to petroleum contamination should be reported to the local fire marshal.

2. Cultural Resources. In order to ensure compliance with section 106 of the National Historic Preservation Act of 1966, the Army must continue consulting with the Virginia Department of Historic Resources (Roger Kirchen, telephone (804) 367-2323, extension 153; mention DHR file number 2005-0089) and also the National Park Service (Bob Kirby, telephone (804) 732-3571, extension 105) relative to this project.

3. Wildlife Protection: Bald Eagles. As indicated above (see "Environmental Impacts and Mitigation," item B.1(b)), the Army should maintain consultation as necessary with the Department of Game and Inland Fisheries (Andy Zadnik, telephone (804) 367-2733) and the U.S. Fish and Wildlife Service

(Eric Davis, telephone (804) 693-6694) regarding continued protection of presently abandoned eagle nests at Fort Lee.

4. Transportation. As indicated above ("Environmental Impacts and Mitigation," item B.8), the City of Hopewell recommends that the Army work through the MPO and the Crater Planning District Commission to address off-post transportation needs caused by the development of Fort Lee. Questions in this regard may be directed to the Crater Planning District Commission (Dennis Morris, telephone (804) 861-1666) or to the City (John Altman, Assistant City Manager, telephone (804) 541-2243).

5. Water Resources Permitting. Questions concerning the Virginia Water Protection Permit or other water permit requirements may be directed to DEQ's Piedmont Regional Office (Ms. Oula Shehab, telephone (804) 527-5069).

C. Guidance Applicable to Fort A. P. Hill

In addition to the regulatory guidance above (see "Regulatory and Coordination Needs, items A.1. through A.6.), the Army should be aware of the following guidance applicable to Fort A. P. Hill.

1. Groundwater Supply. As indicated above (see "Environmental Impacts and Mitigation," item C.7), the area including Fort A. P. Hill is under consideration as a groundwater management area, in which case permits would be needed for development of new wells. DEQ's Division of Water Resources (Joe Hassell, telephone (804) 698-4072) may be contacted if questions arise relative to the need for such permits.

2. Cultural Resources. The Army is requested to provide a copy of the Phase 1 archaeological survey and recommendations concerning Fort A. P. Hill to the Virginia Council on Indians, P.O. Box 1475, Richmond, 23218. Questions on cultural resources may be directed to the Council (Deanna Beacham, telephone (804) 225-2084).

Thank you for the opportunity to review this document. If you have questions, please feel free to contact me (telephone (804) 698-4325) or Charles Ellis of this Office (telephone (804) 698-4488).

Sincerely,

Ellie L. Irons
Program Manager
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Enclosures
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